

[National Geothermal Data System \(NGDS\): an implementation of USGIN](#)

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Submitted by erinmr on Thu, 2013-06-06 14:17 Friday, July 12, 2013 - 10:30 to 12:00

Event: [Summer Meeting 2013](#) [2]

Session Type: [Breakout](#) [3]

Abstract/Agenda:

Over the last 2 years, the US Geoscience Information Network (USGIN) vision has materialized with the deployment of the DOE National Geothermal Data System (NGDS). USGIN occupies a niche characterized by focus on application-neutral delivery of Earth Science information using existing standards and protocols, with an emphasis on data documentation and accessibility.

Although much remains to be done, key components are in place and operational, including: 1) Metadata and file repositories; 2) catalog services using standardized metadata; 3) information exchange schemes for a variety of important data types; 4) client applications; and 5) tutorial and explanatory documentation. More than 180 Data services (OGC WMS, WFS) are being hosted by 12 state geological surveys, with 20 feature types implemented. The catalog system (access at <http://search.usgin.org> [4]) is based on the USGIN profile of ISO19115/19139 and the OpenGeospatial Consortium (OGC) Catalog Service for the Web (CSW 2.0.2). Catalog harvesting with the USGS National Digital Catalog has been implemented, and a metadata profile using the new version of ISO metadata (19115-1/19115-3) is being developed and tested in collaboration with Energistics, the petroleum industry standards organization.

The NGDS Design and Testing Team is developing a deployable 'node in a box' based on the CKAN (<http://ckan.org/> [5]) project to provide NGDS data consumers with a highly functional interface to access the system, and to ease the burden on data providers who wish to publish data in the system. This software package will also provide a reference implementation for USGIN catalog and service deployment.

This breakout session will introduce workflows and tools in use to deploy NGDS data services, and discuss the approach to developing content models and interchange formats for information exchanges. The presentation will lay the ground work for a discussion of the evolving landscape of data sharing, especially the role of standards, information discovery via commercial search engines vs. structured metadata, and information interchange using structured, fixed schema (e.g. XML) vs open-world RDF-type approaches.

Attachments/Presentations:  [Richard_ESIP201307_NGDS.pptx](#) [6]

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[geoscience](#) [12]

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